

REMARKS

The method at issue here involves the making a "linearly scaled" multi-layered coiled hollow fiber bundle configured precisely to promote formation of Dean vortices in a fluid conducted therethrough at a predetermined fluid velocity. The method comprises the coiling of overlapping layers of hollow fiber, the coiling done according to certain predetermined variables, extrapolated from a single layer device according to new algorithms disclosed herein, such that the layers perform substantially equally along a predetermined performance parameter. The accomplishment of "linear scalability" by means of assembling pre-calculated fiber configurations into multiple layers within a coiled fiber bundle -- as opposed to other means -- is unprecedented.

The method is defined in claims 12 and 26 to 28. All stand rejected under 35 U.S.C § 103(a). Claims 26 and 27 are rejected under 35 U.S.C. § 112. Objections are raised against the disclosure, Figure 8, and claim 28.

Applicants attend herein to the objections to the disclosure and Figure 8, but otherwise leave unchanged their specification and claims and maintain all earlier stated positions.

Objections: Disclosure

The examiner requests changing applicants' previously submitted priority claim with the examiner's own suggested phraseology. Applicants agree. The change is made.

Objections: Drawings

The examiner requests changing the legend "Figure 3B" to "Figure 8". Applicants agree. The change is made.

Objection: Claim 28

The examiner objects to claim 28 on the belief that (a) the phrase "angle of winding said hollow fiber" should be changed to "the angle of winding of said hollow fiber", and (b) "30" lacks a scientific unit. Applicants disagree. Applicants' original phraseology is fine. The suggested rephrasing, though not incorrect, is in the nature of style, and hence arbitrary. The scientific unit is clearly "degrees."

35 U.S.C. § 112: Claim 26

Applicants' claim 26 recites inner and outer diameter ranges for the hollow fiber that overlap. The examiner views the overlap as "contradictory", and hence "indefinite". Applicants disagree. Claim 26 does not indicate that all inner diameters within the specified ranges are applicable to all specified outer diameters. Person skilled in the art will understand that an inner diameter can never be larger than an outer diameter.

35 U.S.C. § 112: Claim 27

The examiner states that there is no antecedent basis for "said mandrel" in claim 27. Applicants disagree. Claim 12 recites "a mandrel". Claim 27 depends on claim 26. Claim 26 depends on claim 12. Antecedent basis thus exists.

35 U.S.C. § 103(a): Claim 26

Applicants' claims are rejected under 35 U.S.C. § 103(a) in view of the Belfort reference (U.S. Pat. No. 5,626,758). Basically, the examiner is not persuaded by applicants' argument that "Belfort does not disclose both linear scaling and overlapping fiber coils". The examiner argues: "Belfort teaches both".

The examiner mischaracterizes applicants' argument. Applicants never argued that "Belfort does not disclose both linear scaling and overlapping fiber coils". In point of fact, Applicants' Amendment filed June 9, 2003, at pages 4 to 5, describes at length the disclosure in the Belfort reference of both "scale-up" and "overlapping coils".

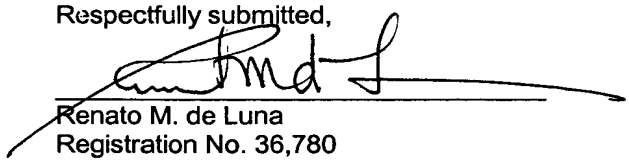
The problem with the Belfort reference is not related to any failure or not to disclose these two features. Rather, it fails as a reference because it does not connect or otherwise link the two. It is one thing to state that the Belfort reference discloses both "scale-up" and "overlapping coils". It is another matter entirely, to state that the Belfort reference obviates use of overlapping coils to accomplish linear scaling.

The §103 rejection cannot survive without linkage. Applicants request its withdrawal.

Conclusion

The pending claims define subject matter neither described nor suggested by the cited art references. The written description, claims, and drawings meet all applicable statutory requirements. The application is in condition for allowance.

Respectfully submitted,


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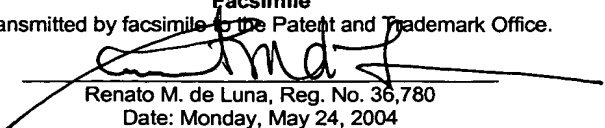
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Enclosures:
Formal Figure 8 (1 sheet)

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Date: Monday, May 24, 2004